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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/092,548

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Junichi Kimura

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01/25/2005

WENDEROTH, LIND & PONACK, L.L.P.

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WASHINGTON, DC 20006-1021

EXAMINER

HA, NATHAN W

ART UNIT

PAPER NUMBER

2814

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/092,548	Applicant(s) KIMURA, JUNICHI	
	Examiner Nathan W. Ha	Art Unit 2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-19, 21-26, 28- 45, and 47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-19, 21-26, 28- 45, and 47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Cancellation of Claims 46 and 48 is acknowledged. Accordingly, the previous rejections under 35 U.S.C. 112, first paragraph, have been withdrawn.

Claim Objections

2. Claim 31 is objected to because of the following informalities: the element "a strip line", in claim 31, should be changed to "said strip line". Appropriate correction is required. Please check the entire claims for the similar error.

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 18-19, 21-26, 28- 45, and 47 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamada et al. (US 6,570,469, newly cited, hereinafter, Yamada.)

In regard to claims 18, 34, and 47, in fig. 4, Yamada discloses a multi-layer board comprising:

a ceramic layer 15 (col. 6, line 1) having a first side and a second side opposite said first side, the ceramic layer having a dielectric constant, 58, for example, (col. 6, line 2);

an impedance element on said ceramic layer, for example, element 12;

a first resin layer 17 over said first side of said ceramic layer (col. 6, line 4), the first resin layer having a dielectric constant lower than said dielectric constant of said ceramic layer, 4, for example, (col. 6, line 5);

a second resin layer, also 17, over said second side of said ceramic layer;

a third resin layer 6 (col. 8, line 39) over said first resin layer; and

a strip line 12 on said first resin layer.

In regard to claims 19, 33, and 38, Yamada further discloses an electronic component 4 mounted on said first resin layer (col. 8, line 39).

In regard to claim 21, Yamada further comprises a strip line on said third resin layer, not numbered (fig. 4).

In regard to claim 22, Yamada further comprises an electronic component 7 mounted on said third resin layer (col. 15, lines 63-65).

In regard to claims 23 and 36, Yamada further comprises a fourth resin layer, also 17, between the first resin layer and the third resin layer.

In regard to claims 24 and 25, wherein said impedance element comprises a patterned inductor 12, as mentioned above (fig. 4).

In regard to claims 28 and 29, the component on the substrate may be functioned as a resistor since they have a impedance value, fir example, fig 12, shows a line element 105 functions as a resistor (col. 1, lines 25-30).

In regard to claim 30, wherein the impedance element comprises a first impedance element 12 on the first side of said ceramic layer, further comprising a second impedance element on said second side of said ceramic layer (fig. 4).

In regard to claim 31, see the above discussion regarding to claim 18, wherein the strip line is on the first resin layer.

In regard to claim 45, see above discussion regarding to claim 18, where the resin layer has lower dielectric constant than the ceramic layer.

In regard to claims 26 and 32 and with the above discussions, power line is actually ground line since they function as electrical conductive elements, for example, element 7 is a land and connected to a power line (fig. 4).

In regard to claim 35, Yamada further discloses a second strip line on the second resin layer (fig. 4).

In regard to claim 37, wherein a strip line is formed on the third resin layer (fig. 4).

In regard to claim 39, wherein a fourth resin layer is disposed between first and third resin layers (fig. 4). In this case, the first resin layer is layer 6.

In regard to claims 40-41 and 44, resin film is a form of polyimide, the laminated structure forms a capacitor since there is dielectric layer formed between conductive plates (col. 8, lines 50-55).

In regard to claim 42, figure 4 show an impedance element, for example, capacitor on the other side of the substrate.

In regard to claim 43, see above discussions regarding to claim 18, wherein a strip line on the resin layer.

In regard to claims 25, 29, and 41, in the alternative, are rejected under 35 U.S.C. 103(a) as obvious over Yamada, the above reference.

Yamada does not explicitly teach that the second compound in an as laser-trimmed limitation. However, this limitation is taken to be a product by process limitation; it is the patentability of the claimed product and not of recited process steps which must be established. Therefore, when the prior art discloses a product which reasonably appears to be identical with or only slightly different than the product claimed in a product-by process claim, a rejection based on sections 102 or 103 is fair. A product by process claim directed to the product per se, no matter how actually made, In re Hirao, 190 USPQ 15 at 17 (footnote 3). See In re Fessman, 180 USPQ 324,326(CCPA 1974); In re Marosi et al., 218 USPQ 289,292 (Fed. Cir. 1983); and particularly In re Thorpe, 227 USPQ 964,966 (Fed. Cir. 1985), all of which make it clear that it is the patentability of the final structure of the product "gleaned" from the process steps, which must be determined in a "product by process " claim, and not the patentability of the process. See also MPEP 2113. Moreover, an old or obvious product produced by a new method is not a patentable product, whether claim in "product by process" claim or not.

Response to Arguments

6. Applicant's arguments with respect to claims 18-43 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan W. Ha whose telephone number is (571) 272-1707. The examiner can normally be reached on M-TH 8:00-7:00(EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A handwritten signature in black ink, appearing to read 'Nathan Ha', followed by a stylized flourish or checkmark.

Nathan Ha
January 13, 2005